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09/849,529	05/07/2001	Karen L. Fincher	16517-247 [38-21(51893)B]	8354

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WASHINGTON, DC 20004-1206

EXAMINER
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BORIN, MICHAEL L.

ART UNIT	PAPER NUMBER
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1651  
DATE MAILED: 01/13/2003

(10)

Please find below and or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>09/849,529</b>	Applicant(s) <b>Fincher</b>
Examiner <b>Michael Borin</b>	Art Unit <b>1631</b>



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Oct 15, 2002.

2a) This action is **FINAL**.      2b)  This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-9      is/are pending in the application.

4a) Of the above, claim(s) 2-9      is/are withdrawn from consideration.

5) Claim(s)      is/are allowed.

6)  Claim(s) 1      is/are rejected.

7) Claim(s)      is/are objected to.

8) Claims      are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):

a) All b) Some\* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e):

a) The translation of the foreign language provisions of application has been received.

I acknowledge that I have read this communication and understand it.

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## DETAILED ACTION

### ***Status of Claims***

1. Response to restriction requirement filed 10/16/02 is acknowledged. Applicants elected, with traverse, Group I, and nucleic acid of SEQ ID No 1. Applicant's arguments were considered but are not deemed to be convincing. The restriction requirements still deemed proper and is therefore made FINAL.

Applicant correctly pointed out at double occurrence of claim 3 in the listed groups of inventions. Examiner apologizes for an inadvertent error in listing of claims of each Group. The groups should read as follows:

- I. Claim 1 drawn to polynucleotides., classified in class 536, subclass 23.1.
- II. Claim 2, drawn to a purified polypeptide encoded by a polynucleotide of Group I.
- III. Claims 3-9, drawn to a transformed plant.

Thus, the elected Group I consists of claim 1.

Claims 2-9 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected groups. Cancellation of claims 2-9 and

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***Sequence Listing***

2. The computer-readable sequence listing was approved by STIC for matters of form.

***Specification***

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. See, for example, page 5. Applicant is requested to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01(b).

***Claim Rejections - 35 U.S.C. § 101/ 112-1***

The following is a quotation of the 35 U.S.C. § 101:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use it.

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4. Claim 1 is rejected under 35 U.S.C. § 101 because the claimed invention lacks patentable utility due to its not being supported by either specific and/or substantial utility or a well established utility. The claimed subject matter is not supported by a specific, substantial, and credible utility because the disclosed uses are generally applicable to broad classes of this subject matter. In addition, further characterization of the claimed subject matter would be required to identify or reasonably confirm a "real world" use. The examiner does not find an adequate nexus between the evidence of record and the asserted properties of the claimed subject matter.

The claim is drawn to substantially purified nucleic acid molecule of SEQ ID NO. 1 that encodes a cotton protein, or to a fragment of said nucleic acid. No open reading frame, start/stop codons, or encoded protein is identified in the specification for SEQ ID NO.1. No specific biological function is asserted for any protein encoded by SEQ ID NO. 1.

There is no other particular identifying information associated with any SEQ ID NO. 1. The specification does not list any potentially homologous prior art sequences for SEQ ID NO.1.

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mapping. None of these is considered to be specific and substantial in view of the limited information provided in the specification. No plant traits are attributed to SEQ ID NO.1. No complete gene is disclosed for SEQ ID NO. 1. No DNA maps or chromosomal locations are identified. No polymorphisms are identified. The specification does not disclose how a polymorphism would be recognized by those of ordinary skill in the art given the incomplete sequences disclosed. One of ordinary skill in the art would have reason to doubt that SEQ ID NO.1 was full length based upon the short length of the claimed SEQ ID NO. Further research and experimentation would be required to identify a full length sequence that encoded a full-length protein, to characterize the chromosomal location, to determine the presence of polymorphisms, and to determine any associated plant traits. Identifying and studying the properties of the claimed subject matter itself or the mechanisms in which the claimed subject matter is involved does not define a "real world" context or use. Similarly, the other listed and asserted utilities are neither substantial nor specific due to being generic in nature and applicable to a myriad of such compounds. Note, because the claimed invention is not supported by a specific and substantial asserted utility for the reasons set forth above, credibility has not been assessed. Neither the specification as filed nor any art of record discloses or suggests any property or

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activity for the nucleic acid compounds such that another non-asserted utility would be well established for the compounds.

Further, even if the nucleotide of SEQ ID No. 1 had a demonstrated utility, there is no specific or substantial utility for its fragments because no structural requirements for [a presumed] utility of these fragments are identified.

The examiner does not find an adequate nexus between the evidence of record and the asserted properties of the claimed subject matter. Applicant should explicitly identify a specific, substantial, and credible utility for the claimed invention and establish a probative relation between any evidence of record and the originally disclosed properties of the claimed invention.

5. Claim is also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a credible, specific, and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

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***Claim Rejections - 35 USC § 112, first paragraph.***

6. Claims 1-2 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a written description rejection.

Claim 1 is directed to a nucleic acid molecule "that encodes a plant protein or fragment thereof comprising." The specification fails to describe any open reading frames, start/stop codons, or encoded proteins for any SEQ ID NO, SEQ ID No. 1 in particular. As such, these nucleic acid molecules are not described. At best, the SEQ ID NOS. may include a sequence encoding a fragment but not a full length protein. The use of the term "comprising" is interpreted to encompass full length proteins and gene sequences that have not been disclosed. The common structural features of these encoded plant proteins or fragments are not disclosed and thus the claimed subject matter cannot be considered as being described.

The specification describes only the particular SEQ ID NO. 1 and not other sequences containing said sequence. One can only envision the particular sequence disclosed and cannot envision any encoded protein sequence or larger sequences in

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***Claim Rejections - 35 USC § 102***

7. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by the sequence of Database EST, accession number A1726728. The referenced sequence comprises multiple fragments of instantly claimed SEQ ID No. 1(see attached sequence alignment).

***Conclusion.***

8. No claims are allowed

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Borin whose telephone number is (703) 305-4506. Dr. Borin can normally be reached between the hours of 8:30 A.M. to 5:00 P.M. EST Monday to Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Woodward, can be reached on (703) 308-4028. The fax telephone number for this group is (703) 305-3014.

Any inquiry of a general nature or relating the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

*11/17/07*